REMARKS/ARGUMENTS

The Examiner rejected 1-9, 11-19, and 21-19 as anticipated (35 U.S.C. §102) by Popp (Pub No. US 2002/0133437). Applicant traverses the rejections for the following reasons.

Independent claims 1, 11, and 21 concern generating an interface to elements in a document, wherein the document defines a relationship of the elements and at least one attribute for each element. These claims require generating a class implementing methods for at least one element from information provided on elements in the document and a mapping indicating at least one element in the document to map to a class, wherein the at least one indicated element in the document for which the class is generated can be accessed and affected by the methods implemented in the class.

The Examiner cited pg. 2, paras. 0026-0027 and pg. 5, paras. 0069-0070 as disclosing the claim requirement of generating a class implementing methods for at least one element from information provided on elements in the document and a mapping indicating at least one element in the document to map to a class. (Office Action, pg. 3). Applicant traverses.

The cited pg. 2 mentions how objects classes are defined for HTML elements in an HTML document, such that a there is a one-to-one mapping of HTML elements to object classes. Although the cited pg. 2 mentions how object classes are created for HTML elements, nowhere does the cited pg. 2 anywhere disclose generating a class implementing methods for at least one element from information on elements and a mapping indicating at least one element in the document to map to the class.

The claims 1, 11, and 21 require that there is a "mapping" data structure indicating elements to map to a class that is used to generate classes implementing methods for the elements. The cited pg. 2 discusses how a process of defining classes of objects for each HTML element has the effect of "providing a one-to-one mapping between each HTML element and object classes." (Pg. 2, par. 0026). The cited pg. 2 is discussing how the result of generating the object classes produces a mapping of elements to object classes. However, nowhere does the cited pg. 2 anywhere disclose or suggest that a "mapping" data structure of elements to classes is used to generate the object classes, or class implementing methods as claimed.

Moreover, the cited Popp teaches away from using a mapping to generate classes for the elements. For instance, Popp discusses how an object tree of element objects is generated from

the HTML document and that each object in the object tree corresponds to an object class which is instantiated. (Pg. 5, para. 0075.). Thus, Popp does not use a mapping data structure indicating elements to map to a class to generate a class implementing methods for document elements as claimed. Instead, Popp parses the HTML document to generate an object tree, and then generates the object classes from the objects in the tree.

The cited pg. 5, paras. 0069-0070 of Popp also discusses how the HTML template is parsed to generate an object tree based on identified HTML elements, and that an HTML object is instantiated for the objects in the object tree. Again, this cited pg. 5 shows how Popp teaches away from the claim requirement of using a separate "mapping" structure indicating at least one element in the document to map to a class to generate the classes implementing methods for the elements. Instead, Popp generates the object classes by parsing the document to generate an object tree, not using a mapping data structure as claimed.

The Examiner cited pg. 2, paras. 0026-0027 and pg. 3, para 0050 as disclosing the claim requirement that the at least one indicated element in the document for which the class is generated can be accessed and affected by the methods implemented in the class. (Office Action, pg. 3). Applicant traverses.

The cited pg. 2 and pg. 3 mention that "[e]ach object class can include methods to manipulate the HTML elements within an HTML document." Notwithstanding this comment, Popp does not disclose and in fact teaches away from the claim requirement that methods in the generated claims can access and affect at least one element in the document. Popp mentions that "[o]nce the object tree is generated, the HTML statements of an HTML document are generated by sending a 'create' message to the objects in the object tree." (Pg. 6, para. 0081) Further, the "object tree is traversed during HTML document generation" (pg. 2, para. 0027).

Popp does not use the generated object classes to access and affect elements in the document. Instead, Popp discusses generating an object tree, which is separate from the document, manipulating elements in the object tree, and then generating the HTML document from the object tree. Thus, in Popp the access and operations on the elements occurs through the element objects in the object tree, not within the document as claimed. For instance, Popp mentions that the "objects instantiated ... are used to render the Web page definition (i.e., HTML document)." (Pg. 5, para. 0069)

Although the cited Popp does manipulate HTML elements that are in an HTML document, in operation Popp accesses and effects element objects in the object tree. Thus, Popp may discuss operating on elements from a document through the object tree, but nowhere does the cited Popp disclose accessing and affecting the elements in the document itself as claimed.

Accordingly, Applicant submits that claims 1, 11, and 21 are patentable over the cited art because Popp does not disclose all the claim requirements.

Dependent claims 2-10, 12-20, and 22-30 are patentable over the cited art because they depend from claims 1, 11, and 21, which are patentable over the cited art for the reasons discussed above. Moreover, the below discussed dependent claims provide additional grounds of patentability over the cited art.

Claims 2, 12, and 22 depend from claims 1, 11, and 21 and further require that the mapping includes a class name for each indicated element. The Examiner cited pg. 2, para 0026 and pgs. 4-5, para. 0063 of Popp as disclosing the additional requirements of these claims. (Office Action, pg. 3) Applicant traverses.

The cited Popp mentions that the name of the object class can mirror the name of the corresponding HTML element to provide an easy association. Although the cited Popp mentions how the object classes in the object tree can use the HTML element name, nowhere does the cited Popp disclose or suggest the claim requirement that a mapping indicating elements in the document to map to a class include a class name for the element to map. Instead, the cited Popp uses the HTML element name for the class name, not a class name included in a separate mapping data structure that is used to generate the classes.

Accordingly, claims 2, 12, and 22 provide additional grounds of patentability over the cited art.

Claims 3, 13, and 23 depend from claims 1, 11, and 21 and further require that the mapping indicates a data type for at least one attribute of the indicated element. The Examiner cited pg. 1, para. 0014 and pg. 6, para 0079 as disclosing the additional requirements of these claims. (Office Action, pgs. 3-4) Applicant traverses.

The cited pg. 1 mentions that HTML elements have properties, such as type. The cited pg. 6 mentions that a parser identifies a type of an element. Although the concept of type for elements is known, nowhere does the cited Popp anywhere disclose or suggest the claim

requirement that a mapping indicating elements in the document to map to a class indicate a type

for an attribute of an element to map to a class. Nowhere does the cited Popp anywhere disclose

or suggest a separate mapping data structure that provides data type for attributes of elements.

Instead, the cited pg. 6 of Popp has the parser identify the type from the current element

statement in the document.

Accordingly, claims 3, 13, and 23 provide additional grounds of patentability over the

cited art.

Claims 4, 14, and 24 depend from claims 1, 11, and 21 and further require that the

relationship of the elements in the document are arranged in a hierarchical relationship, and

wherein the methods in the at least one class generated for the element allow a user to directly

access and affect the element in the document. The Examiner cited pg. 2, paras. 0024 and 0026

as disclosing the additional requirements of claims 4, 14, and 24. (Office Action, pg. 4)

Applicant traverses for the following reasons.

As discussed, the cited Popp mentions that the object calls includes method to manipulate

the HTML element in the HTML document. However, as discussed, in operation, Popp teaches

away from accessing and manipulating the elements directly within the document and instead

generates an object tree of objects that can be manipulated, so that the elements are affected

through the object tree. In Popp, the HTML document is generated from the objects in the object

tree. Nowhere does the cited Popp anywhere disclose or suggest allowing a allow a user to use

methods directly access and affect the element in the document. Instead, with Popp, the classes

are used to manipulate the objects in the object tree or generate the HTML document from the

objects, not the document itself as claimed.

Accordingly, claims 4, 14, and 24 provide additional grounds of patentability over the

cited art.

Claims 5, 15, and 25 depend from claims 4, 14, and 24 and additionally require accessing

the at least one element in the document indicated in the mapping using a hierarchical application

program interface (API), wherein one class is generated for each accessed element. The

Examiner cited pg. 4, para. 0062 as disclosing the additional requirements of these claims.

(Office Action, pg. 4). Applicant traverses.

The cited pg. 4 mentions that objects corresponding to the HTML elements in the document are arranged in an object tree and rendering the HTML from the objects document methods of an object class to manipulate an HTML element. Although the cited pg. 4 mentions an object tree of objects corresponding to HTML elements, nowhere does the cited pg. 4 anywhere teach or suggest accessing an element in the document using a hierarchical application program interface, where there is one class for each element.

Accordingly, claims 5, 15, and 25 provide additional grounds of patentability over the cited art.

Claim 6, 16, and 26 depend from claims 1, 11, and 21, respectively, and further require that the mapping indicates an interface to generate for the class, wherein the interface defines methods to access the element for which the class is generated. The Examiner cited the previously discussed pg. 2, paras. 0026-0027 and pg. 5, paras. 0069-0070 as disclosing the above claim requirements. (Office Action, pgs. 4-5)

The cited pgs. 2 and 5 discuss generating object classes for each HTML element, where each object class can include methods to implement the HTML element. However, nowhere does the cited Popp discloses a mapping data structure that indicates an interface to generate for the class, where the interface defines methods to access the element for the class. Instead, the cited Popp mentions that the object class can include methods, not that a mapping data structure, used to generate the classes, also indicate an interface to generate for the class.

Accordingly, claims 6, 16, and 26 provide additional grounds of patentability over the cited art.

Claims 7-10, 17-20, and 27-30 are patentable over the cited art because they depend from claims 1, 11, and 21, which are patentable over the cited art for the reasons discussed above, and because their additional requirements in combination with the base and any intervening claims provide further distinction over the cited art. Moreover, the Examiner rejected claims 10, 20, and 30 as obvious in view of Davidson and another patent, Skinner (U.S. Patent No. 6,085,198). However, Skinner was applied for the additional requirements of claims 10, 20, and 30, not the requirements of the base claims 1, 11, and 21 which in combination with the dependent claims provide still further grounds of patentability over the cited art.

Conclusion

For all the above reasons, Applicant submits that the pending claims 1-30 are patentable over the art of record. Applicant submits that no additional fee is needed. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0460. The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

Dated: <u>April 23, 2004</u>

By: _____
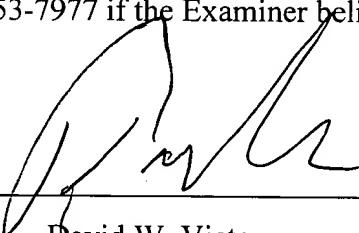
David W. Victor
Registration No. 39,867

<u>Please direct all correspondences to:</u>

David Victor
Konrad Raynes & Victor, LLP
315 South Beverly Drive, Ste. 210
Beverly Hills, CA 90212
Tel: 310-553-7977
Fax: 310-556-7984